

TEST REPORT

APPLICANT : HANGZHOU XINGUANG BICYCLE INDUSTRY CO.,LTD

ADDRESS : 72-1 Zha Shang, Taoyuan Village, Puyang Town, Xiaoshan District, Hangzhou City, Zhejiang Province, China

SAMPLE DESCRIPTION : FOOT SCOOTER

ITEM NO. : 371-054V00WT、 371-054V00BU、 371-054V00PK、
XG-25-12LG、 XG-25-12BG

MANUFACTURER : HANGZHOU XINGUANG BICYCLE INDUSTRY CO.,LTD

AGE REQUESTED ON APPLICATION FORM : 5+

LABELED AGE GRADE : 5+

AGE GRADE APPLIED IN TESTING : 5+

SAMPLE RECEIVED DATE : 24 - Apr - 2025

FURTHER INFORMATION DATE : 21 - May - 2025

TURN AROUND TIME : 28 - Apr - 2025 to 21 - May - 2025

REVISED DATE : 23 - May - 2025



The following test item(s) was/were performed on submitted sample(s) and/or component(s) confirmed by applicant

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Phthalates Content	CPSC 16 CFR part 1307	Pass
Total Lead Content in Paint / Surface Coating	US CPSIA, Section 101(15 U.S.C. § 1278a)	Pass
Phthalates Content	US CPSIA, Section 108	Pass
Total Lead Content in Substrate	US CPSIA, Section 101(15 U.S.C. § 1278a)	Pass
Flammability of Toys	ASTM F963-23, Section 4.2	Pass
Heavy Metals	ASTM F963-23, Section 4.3.5	Pass
Mechanical and Physical Properties	ASTM F963-23	Pass
Phthalates Content	ASTM F963-23, Section 4.3.8	Pass
Tracking Label Assessment	US CPSIA, Section 103	Present
Physical and Mechanical Hazards	EN 71 Part 1:2014+A1:2018	Pass
Labeling Requirement	Directive 2009/48/EC	Pass
Flammability of Toys	EN71 Part 2:2020	Pass
Migration of Certain Elements	EN 71 Part 3:2019+A1:2021	Pass
Migration of Certain Elements	BS EN 71 Part 3:2019+A1:2021	Pass
Migration of Certain Elements	EN 71 Part 3:2019+A2:2024	Pass
Migration of Certain Elements	BS EN 71 Part 3:2019+A2:2024	Pass
Labeling Requirement for United Kingdom	The Toys (Safety) Regulations 2011 and The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019	Pass
Physical and Mechanical Hazards	BS EN71 Part 1:2014+A1:2018	Pass
Flammability of Toys	BS EN71 Part 2:2020	Pass
Total Cadmium Content	REACH Annex XVII, Entry 23	Pass
Phthalates content	REACH Annex XVII, Entry 51 & 52	Pass
Polycyclic Aromatic Hydrocarbons (PAHs)	REACH Annex XVII, Entry 50	Pass
Banned AZO Dyes	REACH Annex XVII, Entry 43	Not Applicable
Physical and Mechanical Hazards	CPSC Regulations	Pass

Remark: This report cancels and supersedes report number EFHZ25045352-CG-01 issued on May 21, 2025.
Modification description: Per client's request, modified sample photo in the revised report.

Samples are obtained by express delivery, Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Hangzhou) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. Unless otherwise stated from the customer, regulation or the standard specification, Eurofins will apply it in accordance with ILAC G8:09/2019-(binary statement for simple acceptance rule). If you happen to have any comments, please do it by sending email to info.hz@cpt.eurofinscn.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Hangzhou) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint.hz@cpt.eurofinscn.com and referring to this report number.

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
Eurofins Product Testing Service (Hangzhou) Co., Ltd

Sara

Sara Liu
Quality Manager



SAMPLE PHOTO(S)



EFHZ25045352-CG-01+Rev1

TO BE CONTINUED

REFERENCE SAMPLE PHOTO(S)



371-054V00BU

The reference samples have not been tested in current report, but according to customer's request, the picture has also been included. For sample tested in current report, please refer to "sample photo"

TO BE CONTINUED

COMPONENT LIST

Component No.	Component	Sample No.
1	White coating on metal	A,D
2	Lake green coating on metal	B
3	Green coating on metal	C
4	Pink coating on metal	D
5	Blue coating on metal	E
6	Black coating on metal	A,B,C,D
7	Black soft plastic handle	A,B,C,D
8	Transparent soft plastic excluding coating	A,B,C,D
9	Black plastic brake(handle/back wheel)	A,B,C,D
10	Black soft plastic wire sheath	A,B,C,D
11	White plastic cover	A,B,C,D
12	Black plastic deck	A,B,C,D
13	Black plastic hub/gasket	A,B,C,D
14	Lake green plastic hub	B
15	Green plastic hub	C
16	Pink plastic hub	D
17	Black soft plastic brake block(back wheel)	A,B,C,D
18	White foam	A,B,C,D
19	Black foam wheel	A,B,C,D,E
20	Transparent/black soft plastic sticker	A,B,C,D
21	White fabric fastener	A,B,C,D
22	Silver metal excluding coating(body)	A,B,C,D
23	Silver metal(brake wire)	A,B,C,D
24	Silver metal(clamp)	A,B,C,D
25	Silver metal screw/nut	A,B,C,D
26	Silver metal stick/spring/sheet(parking stand)	A,B,C,D
27	Golden plated metal screw/nut/axle	A,B,C,D
28	Silver metal brake wire	A,B,C,D
29	Silver metal cover(brake wire)	A,B,C,D
30	Silver metal connector	A,B,C,D
31	Blue plastic hub	E

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates as specified in CPSC 16 CFR part 1307.

Test Method: CPSC-CH-C1001-09.4

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1+2+3	4+5+6	7+8+9	10+11+12
Diisononyl phthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					13+14+15	16+17	18+19	20
Diisononyl phthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					31
Diisononyl phthalate (DINP)	28553-12-0	%	0.1	0.005	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

1 mg/kg = 1 ppm = 0.0001%

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Total Lead Content in Paint / Surface Coating

Test Request: Total lead in paint/ similar surface coatings as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 101(15 U.S.C. § 1278a)

Test Method: CPSC-CH-E1003-09.1

The sample was acid digested, and total lead content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result			
				1	2	3	4
Total Lead (Pb)	mg/kg	90	10	ND	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result	
				5	6
Total Lead (Pb)	mg/kg	90	10	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: Phthalates Content as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 108

Test Method: CPSC-CH-C1001-09.4

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1+2+ 3	4+5+ 6	7+8+ 9	10+1 1+12
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005 0	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005 0	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005 0	ND	ND	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005 0	ND	ND	ND	ND
Diisononylphthalate (DINP)	28553-12- 0	%	0.1	0.005 0	ND	ND	ND	ND
Diisodecylphthalate (DIDP)	26761-40- 0	%	0.1	0.005 0	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					13+1 4+15	16+1 7	18+1 9	20
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005 0	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005 0	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005 0	ND	ND	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005 0	ND	ND	ND	ND
Diisononylphthalate (DINP)	28553-12- 0	%	0.1	0.005 0	ND	ND	ND	ND
Diisodecylphthalate (DIDP)	26761-40- 0	%	0.1	0.005 0	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					31
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005 0	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005 0	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005 0	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	0.1	0.005 0	ND
Diisononylphthalate (DINP)	28553-12- 0	%	0.1	0.005 0	ND
Diisodecylphthalate (DIDP)	26761-40- 0	%	0.1	0.005 0	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

1 mg/kg = 1 ppm = 0.0001%

MDL = method detection limit

ND = Not detected, less than MDL

For toys and childcare articles: DBP, BBP, DEHP

Additional requirements for toys and childcare articles, which can be placed in the mouth by children: DNOP, DINP, DIDP

TO BE CONTINUED

TEST RESULT

Total Lead Content in Substrate

Test Request: Total lead in substrate as specified in US Consumer Product Safety Improvement Act 2008 (CPSIA), Section 101(15 U.S.C. § 1278a)

Test Method: CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3
The sample was acid digested, and total lead content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result			
				7	8	9	10
Total Lead(Pb)	mg/kg	100	10	ND	ND	16	ND

Test Item(s)	Unit	Limit	MDL	Result			
				11	12	13	14
Total Lead(Pb)	mg/kg	100	10	ND	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result			
				15	16	17	18
Total Lead(Pb)	mg/kg	100	10	ND	ND	16	ND

Test Item(s)	Unit	Limit	MDL	Result			
				19	20	22	23
Total Lead(Pb)	mg/kg	100	10	18	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result			
				24	25	26	27
Total Lead(Pb)	mg/kg	100	10	ND	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result			
				28	29	30	31
Total Lead(Pb)	mg/kg	100	10	ND	ND	ND	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Flammability of Toys

Test Request: As specified in ASTM F963-23, Section 4.2, testing procedure for materials other than textiles (excluding paper) used in toys is contained in Annex A5.

Sample	Limit	Result
A	0.1 inch/second	P
B	0.1 inch/second	P
C	0.1 inch/second	P
D	0.1 inch/second	P

Remark:
P - Pass

TO BE CONTINUED

TEST RESULT

Heavy Metals

1) ASTM F963-23- Heavy Elements – Total Lead in Paint and Similar Surface-Coating Material (Clause 4.3.5.1(1))

Test Method: ASTM International Standard ASTM F963-23, Section 8.3.1 and Annex A7.

Tested Item(s)	Unit	Limit	MDL	Result				
				1	2	3	4	5
Total Lead in Paint	mg/kg	90	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				6				
Total Lead in Paint	mg/kg	90	10	ND				

2) ASTM F963-23- Heavy Elements – Total Lead in Substrate Material (Clause 4.3.5.2(2) (a))

Test Method: ASTM International Standard ASTM F963-23, Section 8.3.1 and Annex A7.

Tested Item(s)	Unit	Limit	MDL	Result				
				7	8	9	10	11
Total Lead in Substrate	mg/kg	100	10	ND	ND	16	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				12	13	14	15	16
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				17	18	19	20	21
Total Lead in Substrate	mg/kg	100	10	16	ND	18	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				22	23	24	25	26
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				27	28	29	30	31
Total Lead in Substrate	mg/kg	100	10	ND	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

3) ASTM F963-23- Heavy Elements – Total Elements Content, Initial Screening for Soluble Migrated Elements Content in Surface Coatings and Substrates Other Than Modeling Clay(Clause 4.3.5.1(2) and 4.3.5.2(2)(b))

Test Method: ASTM International Standard ASTM F963-23, Section 8.3.1 and Annex A7.

Tested Item(s)	Unit	Limit	MDL	Result				
				1	2	3	4	5
Total Antimony	mg/kg	60	5	ND	ND	ND	ND	ND
Total Arsenic	mg/kg	25	5	12	ND	186*	ND	ND
Total Barium	mg/kg	1000	10	ND	ND	ND	ND	ND
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	256	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				6	7	8	9	10
Total Antimony	mg/kg	60	5	ND	ND	ND	677*	ND
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	ND	ND	1010*	ND	ND
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	8	5	92*	5
Total Lead	mg/kg	90	10	ND	ND	ND	16	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				11	12	13	14	15
Total Antimony	mg/kg	60	5	ND	ND	ND	ND	8
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	ND	1411*	1195*	ND	30
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	ND	ND	ND
Total Lead	mg/kg	90	10	ND	ND	ND	ND	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

Tested Item(s)	Unit	Limit	MDL	Result				
				16	17	18	19	20
Total Antimony	mg/kg	60	5	ND	20	ND	ND	45
Total Arsenic	mg/kg	25	5	ND	ND	ND	ND	ND
Total Barium	mg/kg	1000	10	48	ND	ND	ND	ND
Total Cadmium	mg/kg	75	5	ND	ND	ND	ND	ND
Total Chromium	mg/kg	60	5	ND	ND	8	ND	7
Total Lead	mg/kg	90	10	ND	16	ND	18	ND
Total Mercury	mg/kg	60	5	ND	ND	ND	ND	ND
Total Selenium	mg/kg	500	10	ND	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Tested Item(s)	Unit	Limit	MDL	Result	
				21	31
Total Antimony	mg/kg	60	5	157*	ND
Total Arsenic	mg/kg	25	5	ND	ND
Total Barium	mg/kg	1000	10	ND	ND
Total Cadmium	mg/kg	75	5	ND	ND
Total Chromium	mg/kg	60	5	ND	ND
Total Lead	mg/kg	90	10	ND	ND
Total Mercury	mg/kg	60	5	ND	ND
Total Selenium	mg/kg	500	10	ND	ND

4) ASTM F963-23- Heavy Elements – Soluble Migrated Elements Content in Surface Coatings and Substrates Other Than Modeling Clay (Clause 4.3.5.1(2) and 4.3.5.2(2)(b))

Test Method: ASTM International Standard ASTM F963-23, Section 8.3.2 to 8.3.5 (excluding 8.3.5.5(3))

Tested Item(s)	Unit	Limit	MDL	Result				
				1	2	3	4	5
Soluble Antimony	mg/kg	60	5	NA	NA	ND	NA	NA
Soluble Arsenic	mg/kg	25	2.5	NA	NA	ND	NA	NA
Soluble Barium	mg/kg	1000	10	NA	NA	ND	NA	NA
Soluble Cadmium	mg/kg	75	5	NA	NA	ND	NA	NA
Soluble Chromium	mg/kg	60	5	NA	NA	ND	NA	NA
Soluble Lead	mg/kg	90	5	NA	NA	ND	NA	NA
Soluble Mercury	mg/kg	60	5	NA	NA	ND	NA	NA
Soluble Selenium	mg/kg	500	10	NA	NA	ND	NA	NA

Tested Item(s)	Unit	Limit	MDL	Result				
				6	7	8	9	10
Soluble Antimony	mg/kg	60	5	NA	NA	ND	ND	NA
Soluble Arsenic	mg/kg	25	2.5	NA	NA	ND	ND	NA
Soluble Barium	mg/kg	1000	10	NA	NA	ND	ND	NA
Soluble Cadmium	mg/kg	75	5	NA	NA	ND	ND	NA
Soluble Chromium	mg/kg	60	5	NA	NA	ND	ND	NA
Soluble Lead	mg/kg	90	5	NA	NA	ND	ND	NA
Soluble Mercury	mg/kg	60	5	NA	NA	ND	ND	NA
Soluble Selenium	mg/kg	500	10	NA	NA	ND	ND	NA

Tested Item(s)	Unit	Limit	MDL	Result				
				11	12	13	14	15
Soluble Antimony	mg/kg	60	5	NA	ND	ND	NA	NA
Soluble Arsenic	mg/kg	25	2.5	NA	ND	ND	NA	NA
Soluble Barium	mg/kg	1000	10	NA	ND	ND	NA	NA
Soluble Cadmium	mg/kg	75	5	NA	ND	ND	NA	NA
Soluble Chromium	mg/kg	60	5	NA	ND	ND	NA	NA
Soluble Lead	mg/kg	90	5	NA	ND	ND	NA	NA
Soluble Mercury	mg/kg	60	5	NA	ND	ND	NA	NA
Soluble Selenium	mg/kg	500	10	NA	ND	ND	NA	NA

TO BE CONTINUED

TEST RESULT

Tested Item(s)	Unit	Limit	MDL	Result				
				16	17	18	19	20
Soluble Antimony	mg/kg	60	5	NA	NA	NA	NA	NA
Soluble Arsenic	mg/kg	25	2.5	NA	NA	NA	NA	NA
Soluble Barium	mg/kg	1000	10	NA	NA	NA	NA	NA
Soluble Cadmium	mg/kg	75	5	NA	NA	NA	NA	NA
Soluble Chromium	mg/kg	60	5	NA	NA	NA	NA	NA
Soluble Lead	mg/kg	90	5	NA	NA	NA	NA	NA
Soluble Mercury	mg/kg	60	5	NA	NA	NA	NA	NA
Soluble Selenium	mg/kg	500	10	NA	NA	NA	NA	NA

Tested Item(s)	Unit	Limit	MDL	Result	
				21	31
Soluble Antimony	mg/kg	60	5	ND	NA
Soluble Arsenic	mg/kg	25	2.5	ND	NA
Soluble Barium	mg/kg	1000	10	ND	NA
Soluble Cadmium	mg/kg	75	5	ND	NA
Soluble Chromium	mg/kg	60	5	ND	NA
Soluble Lead	mg/kg	90	5	ND	NA
Soluble Mercury	mg/kg	60	5	ND	NA
Soluble Selenium	mg/kg	500	10	ND	NA

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL, NA = Not Applicable

The analytical results were adjusted by subtracting analytical correction factor.

*On the initial analysis for soluble heavy metals content, any tested component of greater than the set limit, the result is inconclusive for the requirement and therefore were retested with soluble heavy metals analysis of ASTM F963-23, Sections 8.3.2 to 8.3.5 as specified in Section 8.3.1.3. The result herein is for reference only (show data), please refer to soluble heavy metals content analysis for the corresponding conclusive results.

According to Section 8.3.1.3, if results of total eight elements are below soluble limits for each element as prescribed in the table, the material can be considered to conform to requirements of 4.3.5.1(2) or 4.3.5.2(2)(b), or both, without further testing.

TO BE CONTINUED

TEST RESULT

Mechanical and Physical Properties

Test Request: As specified in Consumer Safety Specification ASTM F963-23

Test Sample: A,B,C,D

Section	Description	Result
4.1	Material Quality	P
4.3.7	Stuffing Materials	N/A
4.5	Sound-Producing Toys	N/A
4.6	Small Objects	N/A
4.6.1	Toys that are intended for children under 36 months of age	N/A
4.6.2	Mouth-Actuated Toys	N/A
4.6.3	Toys that are intended for children over 36 months but less than 72 months	N/A
4.7	Accessible Edges	P
4.8	Projections	P
4.8.1	Bath Toy Projections	N/A
4.9	Accessible Points	P
4.10	Wires or Rods	P
4.11	Nails and Fasteners	P
4.12	Plastic Film	N/A
4.13	Folding Mechanisms and Hinges	N/A
4.14	Cords, Straps and Elastics	N/A
4.15	Stability and Over-Load Requirements	P
4.16	Confined Spaces	N/A
4.17	Wheels, Tires, and Axles	N/A
4.18	Holes, Clearances, and Accessibility of Mechanisms	P
4.19	Simulated Protective Devices	N/A
4.20	Pacifiers	N/A
4.21	Projectile Toys	N/A
4.22	Teethers and Teething Toys	N/A
4.23	Rattles	N/A
4.24	Squeeze Toys	N/A
4.25	Battery-Operated Toys (exclude section 4.25.9 Battery-powered ride-on toys and section 4.25.10 Toys contain secondary cells or secondary batteries)	N/A
4.26	Toys Intended to be Attached to a Crib or Playpen	N/A
4.27	Stuffed and Beanbag-Type Toys	N/A
4.28	Stroller and Carriage Toys	N/A
4.30	Toy Gun Marking	N/A
4.31	Balloons	N/A
4.32	Certain Toys with Nearly Spherical Ends	N/A
4.33	Marbles	N/A
4.34	Balls	N/A
4.35	Pompoms	N/A
4.36	Hemispheric-Shaped Objects	N/A
4.37	Yo Yo Elastic Tether Toys	N/A
4.38	Magnets	N/A
4.39	Jaw Entrapment in Handles and Steering Wheels	N/A
4.40	Expanding Materials	N/A
4.41	Toy Chests	N/A

TO BE CONTINUED

TEST RESULT

Section	Description	Result
5	Labeling Requirements	
5.1	Federal Government Requirements	P
5.2	Age Grading Labeling	P
5.3	Safety Labeling Requirements	P
5.4	Aquatic Toys	N/A
5.5	Crib and Playpen Toys	N/A
5.6	Mobiles	N/A
5.7	Stroller and Carriage Toys	N/A
5.8	Toys Intended to be Assembled by an Adult	P
5.9	Simulated Protective Devices	N/A
5.10	Toys with Functional Sharp Edges or Points	N/A
5.11	Small Objects, Small Balls, Marbles and Balloons	N/A
5.12	Art Materials	N/A
5.13	Electric Toys	N/A
5.14	Battery-Operated Toys	N/A
5.14.1	Battery-Powered Ride-On Toys	N/A
5.14.2	Button or Coin Cell Batteries	N/A
5.15	Promotional Materials	P
5.16	Magnets	N/A
6	Instructional Literature	
6.1	Definition and Description	P
6.2	Crib and Playpen Toys	N/A
6.3	Mobiles	N/A
6.4	Toys Intended to be Assembled by an Adult	P
6.5	Battery-Operated Toys	N/A
6.6	Battery Powered Ride-On Toys	N/A
6.7	Toys in Contact with Food	N/A
6.8	Toy Chests	N/A
6.9	The instructional material for toys which require a manufacturer-supplied specialty or custom tool to access the battery (ies)	N/A
7	Producer' s Markings	
7.1	Producer' s or Distributor' s Name and Address	P
7.2	Battery-Powered Ride-on Toys	N/A
7.3	Toy Chests	N/A

Remark:

P - Pass

NA - Not Applicable

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: ASTM F963-23- Phthalates Content in Toys (including pacifiers, rattles, and teethers)
Material (Section 4.3.8)

Test Method: CPSC-CH-C1001-09.4

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1+2+ 3	4+5+ 6	7+8+ 9	10+1 1+12
Diisononyl phthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					13+1 4+15	16+1 7	18+1 9	20
Diisononyl phthalate (DINP)	28553-12-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND	ND	ND	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND	ND	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND	ND	ND	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND	ND	ND	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					31
Diisononyl phthalate (DINP)	28553-12-0	%	0.1	0.005	ND
Di-n-pentyl phthalate (DPENP)	131-18-0	%	0.1	0.005	ND
Di-n-hexyl phthalate (DHEXP)	84-75-3	%	0.1	0.005	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.1	0.005	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.1	0.005	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	0.1	0.005	ND
Dibutylphthalate (DBP)	84-74-2	%	0.1	0.005	ND
Benzylbutylphthalate (BBP)	85-68-7	%	0.1	0.005	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

1 mg/kg = 1 ppm = 0.0001%

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Tracking Label Assessment

Test Request: As per Consumer Product Safety Improvement Act (CPSIA) 2008 section 103 tracking labels for children products

Test Sample: A,B,C,D

Labeling Content	Observation Result	Location	Conclusion
Name of Manufacturer/ Import / Private Labeler in the tracking label	Aosom Canada Inc	Packaging&Product	Present
Location of production	Ningbo City	Packaging&Product	Present
Date of production	05-2025	Packaging&Product	Present
Cohort information (including the batch, run number, or other identifying characteristic)	371-054V00	Packaging&Product	Present

Remark:

The tracking label assessment was based on the submitted sample and the information provided by the applicant. There was no verification on the validity of such information.

TO BE CONTINUED

TEST RESULT

Physical and Mechanical Hazards

Test Request: As specified in European Standard on Safety of Toys EN 71 Part 1:2014+A1 :2018
Test Sample: A,B,C,D

Section	Description	Result
4	General requirements	
4.1	Material cleanliness (by visual assessment)	P
4.2	Assembly	P
4.3	Flexible plastic sheeting	N/A
4.4	Toy Bags	N/A
4.5	Glass	N/A
4.6	Expanding Materials	N/A
4.7	Edges	P
4.8	Points and Metallic Wires	P
4.9	Protruding parts	P
4.10	Parts moving against each other	P
4.10.1	Folding and sliding mechanisms	N/A
4.10.2	Driving mechanisms.	N/A
4.10.3	Hinges	N/A
4.10.4	Springs	P
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	N/A
4.12	Balloons	N/A
4.13	Cords of toy kites and other flying toys.	N/A
4.14	Enclosures	N/A
4.14.1	Toys which a child can enter	N/A
4.14.2	Masks and helmets	N/A
4.15	Toys intended to bear the mass of a child	P
4.15.1	Toys propelled by the child or by other means	P
4.15.2	Toy bicycles	N/A
4.15.3	Rocking horses and similar toys	N/A
4.15.4	Toys not propelled by a child	N/A
4.15.5	Toys scooters	P
4.16	Heavy immobile toys	N/A
4.17	Projectiles	N/A
4.17.1	General	N/A
4.17.2	All projectiles	N/A
4.17.3	Projectile toy with stored energy	N/A
4.17.4	Certain projectile toys without stored energy	N/A
4.18	Aquatic toys and inflatable toys	N/A
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	N/A
4.20	Acoustics	N/A
4.20.2.1	General	N/A
4.20.2.2	Close-to-the-ear toys	N/A
4.20.2.3	Table-top or floor toys	N/A
4.20.2.4	Hand-held toys	N/A
4.20.2.5	Toys using headphones or earphones	N/A
4.20.2.6	Rattles	N/A
4.20.2.7	Squeeze toys	N/A

TO BE CONTINUED

TEST RESULT

Section	Description	Result
4.20.2.8	Pull-along or push toys	N/A
4.20.2.9	Percussion toys	N/A
4.20.2.10	Wind toys	N/A
4.20.2.11	Cap-firing toys	N/A
4.20.2.12	Voice toys	N/A
4.21	Toys containing a non-electrical heat source	N/A
4.22	Small balls	N/A
4.23	Magnets	N/A
4.24	Yo-yo balls	N/A
4.25	Toys attached to food	N/A
4.26	Toy disguise costumes	N/A
4.27	Flying toys	N/A
4.27.1	General	N/A
4.27.2	Rotors and propellers on flying toys	N/A
4.27.3	Rotors and propellers on remote controlled flying toys	N/A
5	Toys intended for children under 36 months	
5.1	General requirements	N/A
5.2	Soft-filled toys and soft-filled parts of a toy	N/A
5.3	Plastic sheeting	N/A
5.4	Cords, chains and electrical cables in toys	N/A
5.5	Liquid-filled toys	N/A
5.6	Speed limitation of electrically-driven ride-on toys	N/A
5.7	Glass and porcelain	N/A
5.8	Shape and size of certain toys	N/A
5.9	Toys comprising monofilament fibres	N/A
5.10	Small balls	N/A
5.11	Play figures	N/A
5.12	Hemispheric-shaped toys	N/A
5.13	Suction cups	N/A
5.14	Straps intended to be worn fully or partially around the neck	N/A
5.15	Sledges with cords for pulling	N/A
6	Packaging	N/A
7	Warnings, markings and instructions for use	
7.1	General	P
7.2	Toys not intended for children under 36 months	P
7.3	Latex Balloons	N/A
7.4	Aquatic toys	N/A
7.5	Functional Toys	N/A
7.6	Hazardous sharp functional edges and points	N/A
7.7	Projectiles toys	N/A
7.8	Imitation protective masks and helmets	N/A
7.9	Toy kites	N/A
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys	N/A
7.11	Toys intended to be strung across a cradle, cot, or perambulator	N/A
7.12	Liquid-filled teethingers	N/A
7.13	Percussion caps specifically designed for use in toys	N/A
7.14	Acoustics	N/A
7.15	Toys bicycles	N/A
7.16	Toys intended to bear the mass of a child	N/A

TO BE CONTINUED

TEST RESULT

Section	Description	Result
7.17	Toys comprising monofilament fibres	N/A
7.18	Toy scooters	P
7.19	Rocking horses and similar toys	N/A
7.20	Magnetic/electrical experimental sets	N/A
7.21	Toy with electrical cables exceeding 300mm in length	N/A
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	N/A
7.23	Toys intended to be attached to a cradle, cot or perambulator	N/A
7.24	Sledges with cords for pulling	N/A
7.25	Flying toys	N/A
7.25.1	Flying toys	N/A
7.25.2	Remote controlled flying toys	N/A
7.26	Improvised projectiles	N/A

Remark:

P - Pass

N/A - Not Applicable

TO BE CONTINUED

TEST RESULT

Labeling Requirement

Test Request: Labeling requirement including Washing/Cleaning instruction, CE mark, importer / manufacturer name and address, product identification as specified in Directive 2009/48/EC
- Safety of toys

Test Sample: A,B,C,D

Labeling Content	Observation Result	Location	Conclusion
Washing/Cleaning Instruction	Not Applicable	/	/
CE Mark	Present, Correct form, CE marking (height >5.0 mm)	Packaging	Pass
Importer's Name & Address	Present	Packaging	Pass
Manufacturer's Name & Address	Present	Packaging	Pass
Product ID	Present	Packaging	Pass

TO BE CONTINUED

TEST RESULT

Flammability of Toys

Test Request: As Specified in European Standard on Safety of Toys EN71 Part 2:2020

Test Sample: A,B,C,D

Section	Description	Result
4	Requirements	
4.1	General Requirements	P
4.2	Toys to be worn on the head	N/A
4.3	Toy disguise costumes and toys intended to be worn by a child in play	N/A
4.4	Toys intended to be entered by a child	N/A
4.5	Soft-filled toys (Sample was not tested if its maximum dimension is 150mm or less.)	N/A

Remark:

P - Pass

N/A - Not Applicable

TO BE CONTINUED

TEST RESULT

Migration of Certain Elements

Test Request: Migration of certain elements as specified in European Standard on Safety of Toys EN 71 Part 3:2019+A1:2021.

Test Method: General elements, with reference to EN 71 Part 3:2019+A1:2021, analysis was performed by ICP-MS;

Extractable Chromium (VI), with reference to EN 71 Part 3:2019+A1:2021, analysis was performed by IC-ICP-MS/IC-UV/Vis;

Extractable organic tin, with reference to EN 71 Part 3:2019+A1:2021, analysis was performed by GC-MS.

Test Item(s):	Unit	Result							
		1	2	3	4	5	6	7	8
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	62	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	-	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	ND	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	ND	-	-	-	-	-

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result							
		9	10	11	12	13	14	15	16
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	69	95	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	-	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	-	-	-	-	-	-

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result					
		17	18	19	20	21	31
Category Type		III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	179	ND	63	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	-	-	-	-

Note:

#1 - The migration of organic tin is expressed as tributyltin.

#2 - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

#3 - In particular Chromium (III) is calculated by subtracting the Chromium (VI) concentration from the total chromium concentration.

Remarks:

mg/kg = milligram per kilogram

MDL = Method Detection Limit

ND = Not Detected, less than MDL

TO BE CONTINUED

TEST RESULT

Limits –MDL per category type:

Test Item(s):	Unit	Limit	MDL	Limit	MDL	Limit	MDL
Category Type		I		II		III	
Extractable Lead (Pb)	mg/kg	2.0	1.0	0.5	0.2	23	10
Extractable Antimony (Sb)	mg/kg	45	5	11.3	1	560	10
Extractable Arsenic (As)	mg/kg	3.8	0.2	0.9	0.1	47	5
Extractable Barium (Ba)	mg/kg	1500	50	375	10	18750	50
Extractable Cadmium (Cd)	mg/kg	1.3	0.1	0.3	0.05	17	1
Extractable Mercury (Hg)	mg/kg	7.5	0.5	1.9	0.2	94	10
Extractable Selenium (Se)	mg/kg	37.5	2	9.4	1	460	10
Extractable Boron (B)	mg/kg	1200	50	300	10	15000	50
Extractable Cobalt (Co)	mg/kg	10.5	1	2.6	0.2	130	10
Extractable Manganese (Mn)	mg/kg	1200	50	300	10	15000	50
Extractable Strontium (Sr)	mg/kg	4500	50	1125	50	56000	50
Extractable Zinc (Zn)	mg/kg	3750	50	938	50	46000	50
Extractable Copper (Cu)	mg/kg	622.5	10	156	10	7700	50
Extractable Aluminum (Al)	mg/kg	2250	50	560	50	28130	50
Extractable Nickel (Ni)	mg/kg	75	5	18.8	2	930	10
Extractable Tin (Sn)	mg/kg	15000	50	3750	50	180000	50
Extractable Organic Tin	mg/kg	0.9	0.2	0.2	0.2	12	0.2
Extractable Chromium	mg/kg	-	0.02	-	0.005	-	0.02
Extractable Chromium (III) (Cr III)	mg/kg	37.5	2	9.4	1	460	10
Extractable Chromium (VI) (Cr VI)	mg/kg	0.02	0.02	0.005	0.005	0.053	0.02

Category I: dry, brittle, powder-like or pliable toy material

Category II: liquid or sticky toy material

Category III: scraped-off toy material

“-” = Not Regulated

TO BE CONTINUED

TEST RESULT

Migration of Certain Elements

Test Request: Migration of certain elements as specified in British Standard on Safety of Toys BS EN71 Part 3:2019+A1:2021.

Test Method: General elements, with reference to BS EN 71 Part 3:2019+A1:2021, analysis was performed by ICP-MS;
Extractable Chromium (VI), with reference to BS EN 71 Part 3:2019+A1:2021, analysis was performed by IC-ICP-MS/IC-UV/Vis;
Extractable organic tin, with reference to BS EN 71 Part 3:2019+A1:2021, analysis was performed by GC-MS.

Test Item(s):	Unit	Result							
		1	2	3	4	5	6	7	8
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	62	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	-	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	ND	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	ND	-	-	-	-	-

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result							
		9	10	11	12	13	14	15	16
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	69	95	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	-	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	-	-	-	-	-	-

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result					
		17	18	19	20	21	31
Category Type		III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	179	ND	63	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	-	-	-	-

Note:

#1 - The migration of organic tin is expressed as tributyltin.

#2 - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

#3 - In particular Chromium (III) is calculated by subtracting the Chromium (VI) concentration from the total chromium concentration.

Remarks:

mg/kg = milligram per kilogram

MDL = Method Detection Limit

ND = Not Detected, less than MDL

TO BE CONTINUED

TEST RESULT

Limits –MDL per category type:

Test Item(s):	Unit	Limit	MDL	Limit	MDL	Limit	MDL
Category Type		I		II		III	
Extractable Lead (Pb)	mg/kg	2.0	1.0	0.5	0.2	23	10
Extractable Antimony (Sb)	mg/kg	45	5	11.3	1	560	10
Extractable Arsenic (As)	mg/kg	3.8	0.2	0.9	0.1	47	5
Extractable Barium (Ba)	mg/kg	1500	50	375	10	18750	50
Extractable Cadmium (Cd)	mg/kg	1.3	0.1	0.3	0.05	17	1
Extractable Mercury (Hg)	mg/kg	7.5	0.5	1.9	0.2	94	10
Extractable Selenium (Se)	mg/kg	37.5	2	9.4	1	460	10
Extractable Boron (B)	mg/kg	1200	50	300	10	15000	50
Extractable Cobalt (Co)	mg/kg	10.5	1	2.6	0.2	130	10
Extractable Manganese (Mn)	mg/kg	1200	50	300	10	15000	50
Extractable Strontium (Sr)	mg/kg	4500	50	1125	50	56000	50
Extractable Zinc (Zn)	mg/kg	3750	50	938	50	46000	50
Extractable Copper (Cu)	mg/kg	622.5	10	156	10	7700	50
Extractable Aluminum (Al)	mg/kg	2250	50	560	50	28130	50
Extractable Nickel (Ni)	mg/kg	75	5	18.8	2	930	10
Extractable Tin (Sn)	mg/kg	15000	50	3750	50	180000	50
Extractable Organic Tin	mg/kg	0.9	0.2	0.2	0.2	12	0.2
Extractable Chromium	mg/kg	-	0.02	-	0.005	-	0.02
Extractable Chromium (III) (Cr III)	mg/kg	37.5	2	9.4	1	460	10
Extractable Chromium (VI) (Cr VI)	mg/kg	0.02	0.02	0.005	0.005	0.053	0.02

Category I: dry, brittle, powder-like or pliable toy material

Category II: liquid or sticky toy material

Category III: scraped-off toy material

“-” = Not Regulated

TO BE CONTINUED

TEST RESULT

Migration of Certain Elements

Test Request: Migration of certain elements as specified in European Standard on Safety of Toys EN71 Part 3:2019+A2:2024.

Test Method: General elements, with reference to EN 71 Part 3:2019+A2:2024, analysis was performed by ICP-MS;

Extractable Chromium (VI), with reference to EN 71 Part 3:2019+A2:2024, analysis was performed by IC-ICP-MS/IC-UV/Vis;

Extractable organic tin, with reference to EN 71 Part 3:2019+A2:2024, analysis was performed by GC-MS.

Test Item(s):	Unit	Result							
		1	2	3	4	5	6	7	8
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	62	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	-	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	ND	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	ND	-	-	-	-	-

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result							
		9	10	11	12	13	14	15	16
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	69	95	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	-	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	-	-	-	-	-	-

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result					
		17	18	19	20	21	31
Category Type		III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	179	ND	63	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	-	-	-	-

Note:

#1 - The migration of organic tin is expressed as tributyltin.

#2 - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

#3 - In particular Chromium (III) is calculated by subtracting the Chromium (VI) concentration from the total chromium concentration.

Remarks:

mg/kg = milligram per kilogram

MDL = Method Detection Limit

ND = Not Detected, less than MDL

TO BE CONTINUED

TEST RESULT

Limits –MDL per category type:

Test Item(s):	Unit	Limit	MDL	Limit	MDL	Limit	MDL
Category Type		I		II		III	
Extractable Lead (Pb)	mg/kg	2.0	1.0	0.5	0.2	23	10
Extractable Antimony (Sb)	mg/kg	45	5	11.3	1	560	10
Extractable Arsenic (As)	mg/kg	3.8	0.2	0.9	0.1	47	5
Extractable Barium (Ba)	mg/kg	1500	50	375	10	18750	50
Extractable Cadmium (Cd)	mg/kg	1.3	0.1	0.3	0.05	17	1
Extractable Mercury (Hg)	mg/kg	7.5	0.5	1.9	0.2	94	10
Extractable Selenium (Se)	mg/kg	37.5	2	9.4	1	460	10
Extractable Boron (B)	mg/kg	1200	50	300	10	15000	50
Extractable Cobalt (Co)	mg/kg	10.5	1	2.6	0.2	130	10
Extractable Manganese (Mn)	mg/kg	1200	50	300	10	15000	50
Extractable Strontium (Sr)	mg/kg	4500	50	1125	50	56000	50
Extractable Zinc (Zn)	mg/kg	3750	50	938	50	46000	50
Extractable Copper (Cu)	mg/kg	622.5	10	156	10	7700	50
Extractable Aluminum (Al)	mg/kg	2250	50	560	50	28130	50
Extractable Nickel (Ni)	mg/kg	75	5	18.8	2	930	10
Extractable Tin (Sn)	mg/kg	15000	50	3750	50	180000	50
Extractable Organic Tin	mg/kg	0.9	0.2	0.2	0.2	12	0.2
Extractable Chromium	mg/kg	-	0.02	-	0.005	-	0.02
Extractable Chromium (III) (Cr III)	mg/kg	37.5	2	9.4	1	460	10
Extractable Chromium (VI) (Cr VI)	mg/kg	0.02	0.02	0.005	0.005	0.053	0.02

Category I: dry, brittle, powder-like or pliable toy material

Category II: liquid or sticky toy material

Category III: scraped-off toy material

“-” = Not Regulated

TO BE CONTINUED

TEST RESULT

Migration of Certain Elements

Test Request: Migration of certain elements as specified in British Standard on Safety of Toys BS EN 71 Part 3:2019+A2:2024.

Test Method: General elements, with reference to BS EN 71 Part 3:2019+A2:2024, analysis was performed by ICP-MS;
Extractable Chromium (VI), with reference to BS EN 71 Part 3:2019+A2:2024, analysis was performed by IC-ICP-MS/IC-UV/Vis;
Extractable organic tin, with reference to BS EN 71 Part 3:2019+A2:2024, analysis was performed by GC-MS.

Test Item(s):	Unit	Result							
		1	2	3	4	5	6	7	8
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	62	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	-	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	ND	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	ND	-	-	-	-	-

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result							
		9	10	11	12	13	14	15	16
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	69	95	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	-	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	-	-	-	-	-	-

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result					
		17	18	19	20	21	31
Category Type		III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	179	ND	63	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	-	-	-	-	-	-
Extractable Chromium (VI) (Cr VI)	mg/kg	-	-	-	-	-	-

Note:

#1 - The migration of organic tin is expressed as tributyltin.

#2 - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

#3 - In particular Chromium (III) is calculated by subtracting the Chromium (VI) concentration from the total chromium concentration.

Remarks:

mg/kg = milligram per kilogram

MDL = Method Detection Limit

ND = Not Detected, less than MDL

TO BE CONTINUED

TEST RESULT

Limits –MDL per category type:

Test Item(s):	Unit	Limit	MDL	Limit	MDL	Limit	MDL
Category Type		I		II		III	
Extractable Lead (Pb)	mg/kg	2.0	1.0	0.5	0.2	23	10
Extractable Antimony (Sb)	mg/kg	45	5	11.3	1	560	10
Extractable Arsenic (As)	mg/kg	3.8	0.2	0.9	0.1	47	5
Extractable Barium (Ba)	mg/kg	1500	50	375	10	18750	50
Extractable Cadmium (Cd)	mg/kg	1.3	0.1	0.3	0.05	17	1
Extractable Mercury (Hg)	mg/kg	7.5	0.5	1.9	0.2	94	10
Extractable Selenium (Se)	mg/kg	37.5	2	9.4	1	460	10
Extractable Boron (B)	mg/kg	1200	50	300	10	15000	50
Extractable Cobalt (Co)	mg/kg	10.5	1	2.6	0.2	130	10
Extractable Manganese (Mn)	mg/kg	1200	50	300	10	15000	50
Extractable Strontium (Sr)	mg/kg	4500	50	1125	50	56000	50
Extractable Zinc (Zn)	mg/kg	3750	50	938	50	46000	50
Extractable Copper (Cu)	mg/kg	622.5	10	156	10	7700	50
Extractable Aluminum (Al)	mg/kg	2250	50	560	50	28130	50
Extractable Nickel (Ni)	mg/kg	75	5	18.8	2	930	10
Extractable Tin (Sn)	mg/kg	15000	50	3750	50	180000	50
Extractable Organic Tin	mg/kg	0.9	0.2	0.2	0.2	12	0.2
Extractable Chromium	mg/kg	-	0.02	-	0.005	-	0.02
Extractable Chromium (III) (Cr III)	mg/kg	37.5	2	9.4	1	460	10
Extractable Chromium (VI) (Cr VI)	mg/kg	0.02	0.02	0.005	0.005	0.053	0.02

Category I: dry, brittle, powder-like or pliable toy material

Category II: liquid or sticky toy material

Category III: scraped-off toy material

“-” = Not Regulated

TO BE CONTINUED

TEST RESULT

Labeling Requirement for United Kingdom

Test Request: Labeling requirement including Washing/Cleaning instruction, compliance marking, importer / manufacturer name and address, product identification as specified in The Toys (Safety) Regulations 2011 and The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019

Test Sample: A,B,C,D

Labeling Content	Observation Result	Location	Conclusion
Washing/Cleaning Instruction	Not Applicable	/	/
UKCA Mark	Present, Correct form, UKCA marking (height >5.0mm)	Packaging	Pass
Importer's Name & Address	Present	Packaging	Pass
Manufacturer's Name & Address	Present	Packaging	Pass
Product ID	Present	Packaging	Pass

TO BE CONTINUED

TEST RESULT

Physical and Mechanical Hazards

Test Request: As specified in British Standard on Safety of Toys BS EN71 Part 1:2014+A1 :2018
Test Sample: A,B,C,D

Section	Description	Result
4	General requirements	
4.1	Material cleanliness (by visual assessment)	P
4.2	Assembly	P
4.3	Flexible plastic sheeting	N/A
4.4	Toy Bags	N/A
4.5	Glass	N/A
4.6	Expanding Materials	N/A
4.7	Edges	P
4.8	Points and Metallic Wires	P
4.9	Protruding parts	P
4.10	Parts moving against each other	P
4.10.1	Folding and sliding mechanisms	N/A
4.10.2	Driving mechanisms.	N/A
4.10.3	Hinges	N/A
4.10.4	Springs	P
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	N/A
4.12	Balloons	N/A
4.13	Cords of toy kites and other flying toys.	N/A
4.14	Enclosures	N/A
4.14.1	Toys which a child can enter	N/A
4.14.2	Masks and helmets	N/A
4.15	Toys intended to bear the mass of a child	P
4.15.1	Toys propelled by the child or by other means	P
4.15.2	Toy bicycles	N/A
4.15.3	Rocking horses and similar toys	N/A
4.15.4	Toys not propelled by a child	N/A
4.15.5	Toys scooters	P
4.16	Heavy immobile toys	N/A
4.17	Projectiles	N/A
4.17.1	General	N/A
4.17.2	All projectiles	N/A
4.17.3	Projectile toy with stored energy	N/A
4.17.4	Certain projectile toys without stored energy	N/A
4.18	Aquatic toys and inflatable toys	N/A
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	N/A
4.20	Acoustics	N/A
4.20.2.1	General	N/A
4.20.2.2	Close-to-the-ear toys	N/A
4.20.2.3	Table-top or floor toys	N/A
4.20.2.4	Hand-held toys	N/A
4.20.2.5	Toys using headphones or earphones	N/A
4.20.2.6	Rattles	N/A
4.20.2.7	Squeeze toys	N/A

TO BE CONTINUED

TEST RESULT

Section	Description	Result
4.20.2.8	Pull-along or push toys	N/A
4.20.2.9	Percussion toys	N/A
4.20.2.10	Wind toys	N/A
4.20.2.11	Cap-firing toys	N/A
4.20.2.12	Voice toys	N/A
4.21	Toys containing a non-electrical heat source	N/A
4.22	Small balls	N/A
4.23	Magnets	N/A
4.24	Yo-yo balls	N/A
4.25	Toys attached to food	N/A
4.26	Toy disguise costumes	N/A
4.27	Flying toys	N/A
4.27.1	General	N/A
4.27.2	Rotors and propellers on flying toys	N/A
4.27.3	Rotors and propellers on remote controlled flying toys	N/A
5	Toys intended for children under 36 months	
5.1	General requirements	N/A
5.2	Soft-filled toys and soft-filled parts of a toy	N/A
5.3	Plastic sheeting	N/A
5.4	Cords, chains and electrical cables in toys	N/A
5.5	Liquid-filled toys	N/A
5.6	Speed limitation of electrically-driven ride-on toys	N/A
5.7	Glass and porcelain	N/A
5.8	Shape and size of certain toys	N/A
5.9	Toys comprising monofilament fibres	N/A
5.10	Small balls	N/A
5.11	Play figures	N/A
5.12	Hemispheric-shaped toys	N/A
5.13	Suction cups	N/A
5.14	Straps intended to be worn fully or partially around the neck	N/A
5.15	Sledges with cords for pulling	N/A
6	Packaging	N/A
7	Warnings, markings and instructions for use	
7.1	General	P
7.2	Toys not intended for children under 36 months	P
7.3	Latex Balloons	N/A
7.4	Aquatic toys	N/A
7.5	Functional Toys	N/A
7.6	Hazardous sharp functional edges and points	N/A
7.7	Projectiles toys	N/A
7.8	Imitation protective masks and helmets	N/A
7.9	Toy kites	N/A
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys	N/A
7.11	Toys intended to be strung across a cradle, cot, or perambulator	N/A
7.12	Liquid-filled teethingers	N/A
7.13	Percussion caps specifically designed for use in toys	N/A
7.14	Acoustics	N/A
7.15	Toys bicycles	N/A
7.16	Toys intended to bear the mass of a child	N/A

TO BE CONTINUED

TEST RESULT

Section	Description	Result
7.17	Toys comprising monofilament fibres	N/A
7.18	Toy scooters	P
7.19	Rocking horses and similar toys	N/A
7.20	Magnetic/electrical experimental sets	N/A
7.21	Toy with electrical cables exceeding 300mm in length	N/A
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	N/A
7.23	Toys intended to be attached to a cradle, cot or perambulator	N/A
7.24	Sledges with cords for pulling	N/A
7.25	Flying toys	N/A
7.25.1	Flying toys	N/A
7.25.2	Remote controlled flying toys	N/A
7.26	Improvised projectiles	N/A

Remark:

P - Pass

NA - Not Applicable

TO BE CONTINUED

TEST RESULT

Flammability of Toys

Test Request: As Specified in British Standard on Safety of Toys BS EN71 Part 2:2020

Test Sample: A,B,C,D

Section	Description	Result
4	Requirements	
4.1	General Requirements	P
4.2	Toys to be worn on the head	N/A
4.3	Toy disguise costumes and toys intended to be worn by a child in play	N/A
4.4	Toys intended to be entered by a child	N/A
4.5	Soft-filled toys (Sample was not tested if its maximum dimension is 150mm or less.)	N/A

Remark:

P - Pass

NA - Not Applicable

TO BE CONTINUED

TEST RESULT

Total Cadmium Content

Test Request: Total cadmium content as specified in Commission Regulation (EU) 2016/217 amending entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EPA 3050B:1996, EPA 3052:1996, EN 1122:2001 Method B, acid digestion method was used and total cadmium content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result		
				1+2	3+4	5+6
Cadmium (Cd)	mg/kg	1000	5	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result			
				7	8	9	10
Cadmium (Cd)	mg/kg	100	5	ND	ND	16	ND

Test Item(s)	Unit	Limit	MDL	Result			
				11	12	13	14
Cadmium (Cd)	mg/kg	100	5	ND	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result			
				15	16	17	18
Cadmium (Cd)	mg/kg	100	5	ND	ND	16	ND

Test Item(s)	Unit	Limit	MDL	Result		
				19	20	31
Cadmium (Cd)	mg/kg	100	5	ND	ND	ND

Remark:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Phthalates content

Test Request: Phthalates content as specified in entry 51&52 of annex XVII of REACH Regulation (EC) No 1907/2006 and its amendment Commission Regulation (EU) 2018/2005.

Test Method: IEC 62321-8:2017, solvent extraction and quantification by GC-MS.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1+2+ 3	4+5+ 6	7+8+ 9	10+1 1+12
Dibutylphthalate (DBP)	84-74-2	%	-	0.005	ND	ND	ND	ND
Benzylbutyl phthalate (BBP)	85-68-7	%	-	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	-	0.005	ND	ND	ND	ND
Di-isobutyl phthalate (DiBP)	84-69-5	%	-	0.005	ND	ND	ND	ND
Sum (DBP + BBP + DEHP + DiBP)	-	%	0.1	-	ND	ND	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	-	0.005	ND	ND	ND	ND
Diisononylphthalate (DINP)	28553-12-0	%	-	0.005	ND	ND	ND	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND	ND	ND	ND
Sum (DNOP + DINP + DIDP)	-	%	0.1	-	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					13+1 4+15	16+1 7	18+1 9	20
Dibutylphthalate (DBP)	84-74-2	%	-	0.005	ND	ND	ND	ND
Benzylbutyl phthalate (BBP)	85-68-7	%	-	0.005	ND	ND	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	-	0.005	ND	ND	ND	ND
Di-isobutyl phthalate (DiBP)	84-69-5	%	-	0.005	ND	ND	ND	ND
Sum (DBP + BBP + DEHP + DiBP)	-	%	0.1	-	ND	ND	ND	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	-	0.005	ND	ND	ND	ND
Diisononylphthalate (DINP)	28553-12-0	%	-	0.005	ND	ND	ND	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND	ND	ND	ND
Sum (DNOP + DINP + DIDP)	-	%	0.1	-	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					31
Dibutylphthalate (DBP)	84-74-2	%	-	0.005	ND
Benzylbutyl phthalate (BBP)	85-68-7	%	-	0.005	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	-	0.005	ND
Di-isobutyl phthalate (DiBP)	84-69-5	%	-	0.005	ND
Sum (DBP + BBP + DEHP + DiBP)	-	%	0.1	-	ND
Di-n-octylphthalate (DNOP)	117-84-0	%	-	0.005	ND
Diisononylphthalate (DINP)	28553-12-0	%	-	0.005	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND
Sum (DNOP + DINP + DIDP)	-	%	0.1	-	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

1 mg/kg = 1 ppm = 0.0001%

MDL = method detection limit

ND = Not detected, less than MDL

“- “ = Not Regulated

TO BE CONTINUED

TEST RESULT

Polycyclic Aromatic Hydrocarbons (PAHs)

Test Request: Polycyclic Aromatic Hydrocarbons (PAHs) content as specified in Regulation (EU) 2015/326 amending entry 50 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: Solvent extraction and quantification by gas chromatography-mass selective detection (GC-MS) with respect to AfPS GS 2019:01 PAK

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1+2	3+4	5+6	7+8
Benz(a)anthracene	56-55-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Chrysene	218-01-9	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo-(j)-fluoranthene	205-82-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(a)pyrene	50-32-8	mg/kg	0.5	0.2	ND	ND	ND	ND
Dibenz(a,h)anthracene	53-70-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(e)pyrene	192-97-2	mg/kg	0.5	0.2	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					9+10	11+1 2	13+1 4	15+1 6
Benz(a)anthracene	56-55-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Chrysene	218-01-9	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo-(j)-fluoranthene	205-82-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(a)pyrene	50-32-8	mg/kg	0.5	0.2	ND	ND	ND	ND
Dibenz(a,h)anthracene	53-70-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(e)pyrene	192-97-2	mg/kg	0.5	0.2	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					17	18+1 9	20	31
Benz(a)anthracene	56-55-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Chrysene	218-01-9	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo-(j)-fluoranthene	205-82-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(a)pyrene	50-32-8	mg/kg	0.5	0.2	ND	ND	ND	ND
Dibenz(a,h)anthracene	53-70-3	mg/kg	0.5	0.2	ND	ND	ND	ND
Benzo(e)pyrene	192-97-2	mg/kg	0.5	0.2	ND	ND	ND	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Physical and Mechanical Hazards

Test Request: The Mechanical Hazards Requirements of 16 CFR 1500, after Use and Abuse Tests.
Test Sample: A,B,C,D

Section	Description	Result
16 CFR 1501	Small Parts	N/A
16 CFR 1500.48	Sharp Points	P
16 CFR 1500.49	Sharp Edges	P
16 CFR 1510	Rattles	N/A
16 CFR 1511	Pacifier	N/A

Remark:

P - Pass

NA - Not Applicable

The use and abuse tests conducted are:

As Received & Normal Use (1500.50)

Impact Test (1500.53(b))

Torque Test (1500.53(e))

Tension Test (1500.53(f))

Compression Test (1500.53(g))

END OF THE REPORT